Cornwall County Council.

EDUCATION COMMITTEE.

ANNUAL REPORT

OF THE

SCHOOL MEDICAL OFFICER

1936.

E. M. CLARKE, M.D. Lond.

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CORNWALL COUNTY COUNCIL.

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ANNUAL REPORT OF THE SCHOOL MEDICAL OFFICER FOR THE YEAR 1936.

School Medical Staff.

School Medical Officer:

E. M. CLARKE, M.D.Lond.

Assistant School Medical Officers:

DOROTHY A. CHOWN, M.R.C.S. Eng., L.R.C.P. Lond.

J. A. CLARK, M.B., B.S. Lond., M.R.C.S. Eng., L.R.C.P. Lond.

*R. J. E. HANSON, M.A., M.B., B.Ch. Camb., F.R.C.S. Ed.

ELIZABETH MACLEOD, M.D., Ch.B. Ed.

School Oculist:

*R. J. E. HANSON, M.A., M.B., B.Ch. Camb., F.R.C.S. Ed.

School Dental Surgeons:

W. H. ELLAM, B.D.S. Univ. L'pool.

F. R. TAYLOR, L.D.S., R.C.S. Eng.

Dental Attendants:

MRS. C. D. GOOD.

MISS R. P. ROWE.

Orthopædic Surgeon (part-time):

W. W. RENTOUL, M.B., B.Ch., B.A.O. Belf.

Orthopædic Sisters:

MISS H. V. JONSSON, C.S.M.M.G., M.E.

MISS J. D. NEWMAN, C.S.M.M.G.

Health Visitors:

MISS A. V. BATH.

MISS M. BRADLEY.

MISS A. FLAMANK.

MISS D. V. GRAY.

MISS J. C. HENDERSON.

MISS A. A. HOUSMAN.

MISS G. VARCOE.

School Nurses:

The Health Visitors and 154 District Nurses give part-time to school work.

STATISTICS.

Elementary Education Area (excluding the Boroughs of Falmouth and Penzance): ...	863,132 acres.
Higher Education Area:	868,167 acres.
Population (1931 Census):	
Elementary Education Area	282,921.
Higher Education Area	317,968.

	Elementary.	Secondary.
School Population (on books) ...	33,669	3,754
Average Attendance ...	29,740	3,465
Number of Schools	* 294	21
Number of Departments ...	* 357	—

* The Camborne—Redruth: Nancekuke Cl. School and the St. Enoder: Mitchell Cl. School were closed as from the 6th September, 1936.

CO-ORDINATION.

The School Medical Officer is also the County Medical Officer of Health.

The whole-time Health Visitors undertake Maternity and Child Welfare Work and Tuberculosis Work in addition to School Work. The District Nurses undertake School and Maternity and Child Welfare Work in addition to District Nursing.

The County Inspector of Midwives is also the Superintendent of the Cornwall County Nursing Association and the Assistant Inspectors of Midwives are Assistant Superintendents of the Nursing Association.

SCHOOL HYGIENE.

Under this heading the Board of Education ask for a review of Public Elementary Schools, with particular reference to their surroundings, ventilation, lighting, heating, equipment and sanitation; observations on the type and condition of desks and blackboards, sanitary

conveniences and lavatories, playgrounds, water supplies for washing and drinking purposes, school baths, cleanliness of schoolrooms and cloakrooms, arrangements for drying children's clothes and boots, and the relation of the general arrangements of the schools to the health of the children.

Most of these particulars have been referred to in previous reports, and they are constantly receiving attention. In 1914 the Board of Education made a list of the premises which were considered to be defective at that time. The schools were classified in four groups—

Schedule 1 contained 10 schools for which recognition by the Board would be withdrawn as from a fixed date, or would be continued only pending the provision of other premises;

Schedule 2 contained 23 schools in which the defects did not admit of remedy;

Schedule 3 contained 36 schools in which substantial improvement was required as a condition of continued recognition;

Schedule 4 contained 35 schools in which minor improvements were required.

This classification was a provisional one only and was subject to revision and modification.

In Schedule 1, eight of the old schools have been replaced by new schools, the other two are Church of England Schools, one a small school and one an Infants' Department.

In Schedule 2, seven of the old schools have been replaced by new schools, six schools have been closed, and at one school extensive alterations have been made.

In Schedule 3, three of the old schools have been replaced by new schools.

It is impossible to set out all the alterations and improvements effected. Apart from the schools referred to above, the Council has provided 20 new schools. In the scheme for the re-organisation of schools further consideration is being given to the necessity for improvements.

In the five-year plan provision is made for 36 new Senior Schools, and the general effect will be to reduce

the number of departments from 355 to 328, of which 273 will be re-organised while the number of smaller schools with fewer than 100 children will be 202 instead of 218 as at present.

MEDICAL INSPECTION.

In the Elementary Schools the age groups inspected at the annual routine inspections are—

Entrants.

Children 8 years old.

Children 12 years old.

" Specials " selected by parents and teachers and not due for inspection under the three previous groups.

Refraction is undertaken by Dr. Hanson for all children requiring it: for all other work the schools are arranged into four groups, one for each Assistant School Medical Officer. The medical inspections take place in the schools—usually one classroom is used for this purpose except in the few schools where a staff room is available. Where there is no staff room the school work is disorganised, especially if the school consists of one or two rooms only. Parents may have to be accommodated in a classroom containing all the children.

Nearly all the inspections are carried out in the schools but occasionally the homes are visited for examination of those children who are unable to attend school. Parents are always invited for the routine inspections. Each school is visited twice during the year—the second visit is usually made without notice.

FINDINGS OF MEDICAL INSPECTION.

(See Table II at end of report).

(a) Nutrition.

Table II B. gives the numbers examined and the classification made by the School Medical Officers. In 21.1% of the 10,712 children classified the nutrition was excellent, in 69.7% normal, in 8.3% slightly sub-normal, and in 0.8% bad. As usual the figures for the second

age-group show most defects and those for the entrants the least. There is some diversity of standard for the four groups, especially with regard to the boundary between A and B, and for comparative purposes it is useful to add A and B together. Some comparative figures are—

	A	B	C	D
	Excellent.	Normal.	Slightly Sub-normal.	Bad.
Cornwall 1936	21.1	69.7	8.3	0.8
England and Wales, 1935	14.6	74.1	10.6	0.7
London 1935	17.4	76.9	5.6	0.08

The figures for the four areas in Cornwall vary considerably—taking the areas from West to East the following are the results:—

	A	B	C	D
No. 1 Area	7.4	75.5	15.3	1.8
No. 2 Area	15.8	79.4	4.6	0.2
No. 3 Area	29.6	63.4	6.4	0.6
No. 4 Area	41.1	51.7	6.7	0.5

After combining A and B it will be seen that three areas are very similar, the classification for the Western Area being on somewhat different lines although some of the difference may well be due to the number of unemployed in the area.

The total figures for the three age groups inspected are as follows:—

	A	B	C	D
Entrants	21.9	69.6	7.8	0.7
8-year-olds	20.9	69.0	8.9	1.2
12-year-olds	20.4	70.7	8.3	0.6

The entrants are the best, then the 12-year-olds, and last the 8-year-olds. This is the result obtained in most counties. The explanation usually given is that the entrants are of an age which requires and receives more attention from the mothers than the 8-year-olds and the 12-year-olds are better able to look after themselves.

Another indication of the number of children whose nutrition is regarded as below normal is the number for

whom free milk is provided in the schools, which is 7% of those in average attendance. In the Western Area free milk is granted to 8.2% and in the rest of the County to 6.8% of children in average attendance.

(b) Uncleanliness. (See Table VI).

Health Visitors and District Nurses usually make at least one visit to each school each term and inspect all the children present. The figures are very similar to those for 1935. Of the individual children examined, 4,176 were not quite satisfactory. It must be noted that this figure includes all defects found, however slight. This gives a percentage of 13 which is higher than that for England and Wales (about 9%). The corresponding figure for England and Wales in 1930 was 14%. If the inspection is not carefully performed, many cases are missed and the figures seem better. These figures are of course disappointing, but under the present school conditions improvement will be slow owing to the relapse of the chronic cases after cleansing.

(c) Minor Ailments and Diseases of the Skin.

Children suffering from minor ailments or diseases of the skin are excluded from school attendance when necessary and the home treatment supervised by the School Nurses. In large towns the children are sent from the schools to school clinics for daily treatment, but this is only useful in large centres—the numbers are too small elsewhere to warrant the establishment of school clinics. In England and Wales it is usually estimated that about 10% of children in average attendance require treatment annually for minor ailments and about this number of children are followed up by the School Nurses. At the routine inspections rather more children than usual were referred for treatment of skin defects—13.7 per 1,000 instead of about 9 per 1,000—owing to the number of cases of Impetigo.

(d) Visual Defects and External Eye Disease.

The number of children referred for treatment for defective vision was 499 and for squint 79 – 70.3 and

7.4 per 1,000 as compared with 81.7 and 7.8 for England and Wales. The visual defects referred for treatment are usually slightly less in number than those for England and Wales. As regards other eye defects, 3.6 per 1,000 were referred for treatment as compared with 7.3 for England and Wales. This is the usual figure and varies according to the general cleanliness and state of nutrition of the children. Most of these defects were in the West of the County.

(e) Defects of Hearing.

At the routine inspections 38 children were referred for treatment—3.5 per 1,000—about the usual number: 41 were referred for observation. Children referred for treatment for middle ear disease numbered 19 and for observation 18—the number referred for treatment was only 1.8 per 1,000 and as is usually the case was lower than that for England and Wales (4 per 1,000). As in previous years more than half these defects were in the East Central District.

(f) Nose and Throat Defects.

In recent years the Board's figures show the defects for three groups—(a) tonsils only, (b) adenoids only, and (c) tonsils and adenoids combined. In England and Wales the figures are about the same for (a) and (c)—about 19 per 1,000—while about 3 per 1,000 are referred for treatment for adenoids only. In Cornwall there are always more cases of the combined defects referred for treatment—for the year under review 637 or 59.5 per 1,000. The figures for (a)—194 referred for treatment (18.1 per 1,000) and (c)—26 referred for treatment (2.4 per 1,000)—are much the same as for England and Wales. This is one of the groups which shows great variations according to the standards adopted by the School Medical Officers. Large numbers were also referred for further observation and, on comparing the figures, it is usually found that nose and throat defects are much more frequent in Cornwall than in England and Wales generally.

(g) Orthopaedic and Postural Defects.

The figures for these defects vary considerably according to the attention given to postural defects and whether they are specially recommended for treatment or not. The figures of the four School Medical Officers vary from 4 to 78 for spinal curvature and from 18 to 110 for other defects. The combined figures given for spinal curvature are 16.5 defects per 1,000 and for other deformities—16.1 per 1,000: the corresponding figures for England and Wales being 2.5 and 8.0. In a special enquiry made by the Board of Education in 1931–32 it was found that there was some spinal deviation in about 76% of children, although in only very few cases was there any structural defect, the others being postural. Obviously such a large number of defects do not require treatment and only the more serious cases are actually referred for treatment. As a result of the enquiry 16% of children were considered to require treatment for spinal defect in a medical gymnastic class, 7% requiring individual treatment.

(h) Heart Disease and Rheumatism.

As usual the recorded defects are fewer than for England and Wales. Only 6 children were referred for treatment and 16 for observation—0.56 and 1.5 per 1,000 as compared with 1.6 and 3.4 for England and Wales. Rheumatism seems to be comparatively uncommon in the County, but no special inquiries have been made. In very large towns this disease is of sufficient importance to need the provision of clinics and special hospital wards for observation and treatment.

(i) Tuberculosis.

Children suffering from active tuberculosis are rarely seen by the School Medical Officers, but come under the observation of the Tuberculosis Officer and the Orthopaedic Surgeon.

FOLLOWING-UP.

Either a whole-time Health Visitor or a District Nurse attends the routine medical inspections at the

schools and arrangements are made for a nurse to follow up to their homes children in need of treatment and, if necessary, to help in carrying out the treatment. Children excluded from schools by the Head Teachers are also followed up. The figures do not show all the work done by the Health Visitors and the District Nurses but the following are the figures available:—

	Whole-time Health Visitors.	District Nurses.	Total.
Number of children followed up	990	1,780	2,770
Number of visits paid	1,445	4,982	6,427
Number of Medical Inspections attended	164	517	681
Number of Inspections for Cleanliness	147	879	1,026
"Following-up" Tonsils and Adenoids	46	208	254

ARRANGEMENTS FOR TREATMENT.

Nutrition. The arrangements made for the provision of milk in schools have been continued. Milk is supplied in bottles containing one-third of a pint at a cost of a halfpenny per bottle. Milk is provided free of charge for necessitous malnourished children and in special cases Cod Liver Oil is provided free. In a few specially selected cases free milk is provided for the afternoon session as well as the morning session.

At the end of the year 15,128 Elementary and 906 Secondary School children were receiving milk in school. Of the former number, 2,328 were receiving milk free of charge. Approximately 61% of children in average attendance were receiving milk. Cod Liver Oil was provided for about 79 children.

The scientific evidence of the benefit of milk for the average Elementary School child is now generally accepted and the following reports record the impressions of the School Medical Officers concerned:—

Dr. R. J. E. Hanson. In those pupils having milk in school there is noticeable improvement—school-work efficiency—less winter catarrh—pupils more responsive. Those from a distance, in rural areas, particularly benefit. It is best administered not

later than 10.15 a.m. One has gained the impression that dental caries is diminishing, both in incidence and severity, an effect which will be more obvious when expectant and nursing mothers secure an improved dietary and way of living. Zymotic diseases are better resisted, cause less disability with shortened convalescence.

Hearts—diastolic interval. Pupils who are under-nourished, with shortening of the diastolic interval and quickened heart rate, soon improve after taking milk meals, the resulting lengthened diastole gives rest to the heart muscle and improves its nutrition and that of the whole body's musculature, etc.

Dr. Elizabeth Macleod. The children in my area show such an eagerness for and such intense enjoyment of their morning milk that it gives me great pleasure to watch them at ' milk time.' This is particularly noticeable in infants' schools or classes. Children of normal nutrition, who have milk in school regularly every day, appear to me to gain increased energy for work and play.

Malnourished children, even when there is no evidence of increase of subcutaneous fat, show improvement in muscle tone; poise and carriage approach to normal; skin becomes healthier in texture and colour; vitality is gained and there is an increase of interest in work and play. Those receiving free milk have, with few exceptions, shown marked improvement in nutrition and general health.

The consumption of milk in schools does not seem to increase and there are still a few schools where a suitable supply of milk is not available. Arrangements have now been approved for warming the milk when necessary and no doubt if it could be warmed and suitably flavoured it would be more popular. There are always some children who do not like cold milk.

Uncleanliness, Minor Ailments and Diseases of the Skin, External Eye Disease. Children suffering from such defects are followed-up to their homes by the nurses and assistance given in obtaining treatment. When considered necessary, parents are advised to consult their own doctors. It is proposed to open a few treatment centres as an experiment and if it is found desirable further centres could be established.

Visual Defects. These are all referred to the School Oculist for refraction and the prescription of glasses when necessary. The parents make their own arrange-

ments with local opticians but in necessitous cases glasses are provided free by the Authority. Eye tickets are provided for a few cases requiring hospital treatment.

Refraction clinics are arranged at 14 centres, generally in large schools. Children for whom glasses have been prescribed are re-examined from time to time (usually every two years) so that the glasses may be changed when necessary.

The following table gives details of the work undertaken during the year (see also Table IV—Group II) :—

Spectacles prescribed by School Oculist:		
Obtained by parents	419	
Paid for by L.E.A. 235 + 5 on 1935 prescription	240	
Not obtained	60	
	——	719
New frames prescribed by School Oculist:		
Obtained by parents	77	
Obtained by L.E.A.	10	
Not obtained	6	
	——	93
Spectacles repaired by L.E.A.		14
" Continue present spectacles "		334
" No spectacles needed "		153
Children absent from Eye Clinics:		
Parents refuse examination	45	
Child had left school	22	
Child treated privately	25	
Child had left district	12	
	——	104

Nose and Throat Defects. Until a few years ago all cases were referred to the family doctors and no arrangements were made by the Authority for treatment. It being the duty of the Authority to provide such treatment, arrangements were made with 12 hospitals. It is the responsibility of the Authority to make the best available provision for treatment but it was not possible at the time for children to be referred for treatment to a special department in charge of an aural specialist, except for cases in the eastern part of the county for whom provision was made at the Plymouth and Tavistock Hospitals.

The following rules should, according to the Chief Medical Officer of the Board of Education, be invariably applied:—

"(1) General practitioners should not be approved if a specialist is available.

(2) If no specialist is available, medical practitioners holding the F.R.C.S. and having special experience of this work should be approved.

(3) Otherwise, general practitioners should be approved only as a temporary arrangement subject to a satisfactory report from the School Medical Officer of the area.

(4) A general rota of medical practitioners in an area should not be approved."

When the present scheme was started, it was understood that the appointments were temporary ones only and subject to reconsideration should a specialist be available.

A special department has now been established at the Royal Cornwall Infirmary, Truro, and Mr. M. R. Sheridan has been appointed Honorary Surgeon in charge of the department. When the extensions to the present buildings are completed it is proposed to provide Mr. Sheridan with more beds for ear, nose and throat cases, and when these are available in the special department it will be necessary to revise the Authority's present arrangements.

It was formerly suggested that 2% of the children in average attendance required operative treatment for tonsils and adenoids during the year, but during the last few years there has been a tendency to think that only about 1% require operative treatment.

There is no doubt that many more children would be improved by operation, but it is always necessary to consider the possibility of a fatal result and only to recommend operation where it is really very desirable. It is usually considered now that the operation was too lightly undertaken in the past and the Chief Medical Officer of the Board of Education gives the following warning:—

> "The enucleation of tonsils and removal of adenoids is a procedure in which all the precautions must be taken which govern the conduct of a major operation, and in which any faulty administrative or neglected medical or surgical detail may result in disastrous consequences. No child should be submitted to operation unless it is evident that non-surgical conservative methods would fail; the final selection of cases for operation should be made by a surgeon with special experience in diseases of the ear, nose and throat."

Arrangements are made for all children to be retained in hospital for at least one night after the operation.

During the year under review 1.4% of the children in average attendance were submitted to operation (0.8 under the L.E.A. Scheme and 0.6 otherwise) and in the previous year 0.8%, but in this county there are many cases left over from previous years when there were no arrangements for treatment. If the annual percentage of children operated upon remains constant, the percentage of children operated upon some time during their school life would be about 9 times the annual percentage, probably it would be eventually about 10%. In many Preparatory and Public Schools 70% of the children have been operated upon before admission to school.

It will now be possible to get some of the chronic ear cases treated, but there are arrears to be worked off owing to the impossibility of getting some of them treated in previous years.

Dental Defects. (See Table V). There are two School Dentists and a third is about to be appointed. All entrants are inspected and if found to require treatment such treatment is offered. Those children accepting treatment are then re-examined each year and treated if necessary, so that children in the County Scheme should have their teeth in good condition, and it is very noticeable to the School Medical Officers which children do and which do not come under dental treatment. Unfortunately all the children do not accept treatment—65% of those requiring treatment accepted during 1936. This is rather better than the figure for England and Wales for 1935 which was 64%. It is essential that the time

between the dentists' visits should not exceed one year, otherwise the scheme is not likely to be useful. Starting with the 5, 6 and 7 year-old children in 1931, the age-groups for inspection and treatment have now increased until during the current year children up to and including the 13 year-old group are being inspected and treated.

Unfortunately, owing to the insufficient number of dentists, it was found impossible to visit all the schools in one year and ninety-six have had to be omitted.

Out of each 100 children inspected, 86 were found to require treatment, and of these 65% accepted treatment, i.e. 56 which, together with the 14 not requiring treatment, gives 70% as being in a satisfactory condition. Children who refuse treatment on several occasions cannot be included in the scheme owing to the amount of work which would be required; it is only possible to treat satisfactorily those children who are examined and treated each year.

For each 100 children treated in 1936 the following work was done:—

			England and Wales (1935).
Fillings in permanent teeth—			
Western Area	85.7	50.4	69.7
Eastern Area	10.8		
Fillings in temporary teeth—			
Western Area	1.6	0.8	6.8
Eastern Area	—		
Extractions of permanent teeth—			
Western Area	5.5	15.3	33.8
Eastern Area	26.3		
Extractions of temporary teeth—			
Western Area	49.7	80.3	157.3
Eastern Area	114.6		
Other operations—			
Western Area	135.5	97.4	31.3
Eastern Area	54.5		

During the year the dental work has been continued in the holiday periods (Easter, Summer and Christmas). As a general rule this results in only half the usual percentage of children receiving treatment in the particular schools where the holiday work is carried out.

Arrangements for treatment in schools are far from ideal and no doubt more satisfactory arrangements could be made for the actual treatment in well equipped centres apart from the schools. Unfortunately in Cornwall it would be difficult to get the children to such centres for treatment, and a smaller percentage of children would receive treatment than under the present arrangements. Eventually no doubt dental treatment will become available in some general scheme, but for the present it seems likely to remain a school service.

Orthopaedic and Postural Defects. (See Table IV, Group IV).

There are nine orthopaedic clinics maintained by the County Council at—

Penzance.	Tuckingmill.	Bodmin.
St. Just.	Truro.	Wadebridge.
Helston.	St. Austell.	Liskeard.

The Penzance Clinic is provided in conjunction with the Penzance Local Education Authority.

There are also clinics at—

Launceston—maintained by the Devonian Association.

Mount Gold, Plymouth—maintained by the Plymouth Borough Council.

Hospitals. Beds are available at the following hospitals:—

The Royal Cornwall Infirmary, Truro (14 beds).

The Princess Elizabeth Orthopaedic Hospital, Exeter, in connection with the Launceston Clinic.

The Mount Gold Orthopaedic Hospital, Plymouth, in connection with the Mount Gold Clinic.

These clinics and beds have been available for children of school age for the Local Education Authority and for children under school age for the Public Health Committee. In future the number of beds at the Royal

Cornwall Infirmary will be increased to 42 and with the Council's clinics will be available for non-pulmonary cases of tuberculosis, chiefly bones and joints.

Postural Defects. In addition to Miss McDowell, the County Organiser of Physical Instruction, a Male Physical Training Organiser has now been appointed and it is hoped that a scheme will be developed to relieve the orthopaedic clinics of some of the postural defects. It seems desirable that all children should be seen by the Orthopaedic Surgeon in the first place and suitable cases referred for the necessary remedial exercises to be undertaken in the schools.

The following is a summary of the work done at the clinics and hospitals in 1935 and 1936:—

	Under School Age.		School Age.		Total.	
	1935.	1936.	1935.	1936.	1935.	1936.
New Cases seen at the Clinics	78	97	205	336	283	433
Total attendance of cases on Doctors' days	601	727	2037	3210	2638	3937
Cases recommended for admission to Hospital	31	24	75	52	106	76
Number admitted during the year	21	20	69	51	90	71

That fewer cases were admitted in 1936 is due to the average stay in hospital being longer than in 1935, and the fewer cases recommended for hospital treatment may be due to the long waiting list.

The Orthopaedic Surgeon attends each clinic once a month and the Orthopaedic Sister once a week to carry out the necessary treatment. The attendances on the doctor's days at some of the clinics are very large and the provision of further clinics is under consideration.

Heart Disease and Rheumatism. Cases seen are referred to private practitioners.

Tuberculosis. Cases suffering or suspected to be suffering from Tuberculosis are referred to the County Tuberculosis Officer and arrangements made for supervision and treatment when necessary.

The notifications received for children between the ages of 5 and 15 were—

	1935.	1936.
Pulmonary	3	6
Non-pulmonary	9	4
Patients admitted to Tehidy Sanatorium—		
Pulmonary	2	5
Non-pulmonary	11	7
Patients discharged from Tehidy Sanatorium—		
Pulmonary	4	4
Non-pulmonary	8	6

On the 31st December, 1936, there were at Tehidy 2 pulmonary and 9 non-pulmonary cases between the ages of 5 and 15 years.

The notifications are not always confirmed after investigation by the Tuberculosis Officer.

During 1936 the deaths from Tuberculosis among children of school age were—pulmonary 1, non-pulmonary 4. The deaths from non-pulmonary tuberculosis being generally due to meningitis.

Infectious Disease. Full directions are given to the teachers in the Green Handbook. Cases of infectious disease are reported to the County and the District Medical Officer of Health.

Exclusions from school during the year are analysed below :—

	S.M.O's.	Head Teachers.
Impetigo	21	38
Scabies	2	2
Ringworm—		
Body	1	11
Head	13	1
Other Skin Diseases	12	2
Verminous Condition	15	5
Infectious Diseases	10	—
Miscellaneous	11	1
Totals	85	60

Diphtheria. Immunisation remains the only certain method of preventing diphtheria in susceptible subjects, such as most young children are. There has been very little demand for this during the year apart from that undertaken by private medical practitioners. It is only when an epidemic is present that any real interest is taken in this subject.

Open Air Education. There is nothing new to report on this subject. Consideration is given to the arrangement of classrooms, etc. in new school buildings.

Physical Training. A separate report is prepared by the County Organiser.

Provision of Meals. Apart from the provision of milk and cod liver oil for necessitous undernourished children (see page 9), no free meals have been provided in the schools.

Co-operation of Parents, Teachers, School Attendance Officers and Voluntary Bodies.

Parents. The parents are notified when children are due for examination. Parents were present during the examination of 5,903 children (2,764 boys and 3,139 girls) or 46% of the children presented for examination.

Teachers. A considerable amount of clerical work falls on the teachers, especially in the preparation of schedules, sending out of notices to parents, etc. The teachers have great influence in persuading parents to obtain treatment when necessary.

School Attendance Officers. The attendance officers endeavour to get absent children brought to the routine inspections when there is some doubt as to their fitness for school.

Voluntary Bodies. The County Nursing Association co-operates in the School Work and the Maternity and Child Welfare Work by arranging with the County Council for the appointment of suitable persons as

Assistant Superintendents of the County Nursing Association, who are also Assistant Inspectors of Midwives and Health Visitors for maternity and child welfare, school services, and tuberculosis.

The District Nursing Associations co-operate in allowing their nurses to act as school nurses and health visitors.

The Cornwall County Association for the Blind arranges for its visitors to visit the homes and keep blind children (also any doubtful cases) under observation.

The County of Cornwall Association for the Deaf and Dumb undertakes similar work for deaf children.

The Cornwall Committee for the Care of Cripples. The aim of this Committee is to develop, assist and expand the orthopaedic work in the County. It deals as far as possible with treatment, travelling expenses and training for all patients over school age and renders great assistance in helping with the arrangements made for child patients of school age and under. Voluntary helpers attend at all the clinics and undertake much of the work in connection with those clinics.

N.S.P.C.C. A grant of £5 per annum is made to the Society by the Authority. The assistance of the Society's officers is very useful in obtaining improvement of unsatisfactory conditions and in persuading parents to take advantage of the treatment which is available for their children. The inspectors receive reports not only from the school but also from any of the Authority's Officers who find unsatisfactory conditions existing.

The following work was done during the year as a result of reports made by the Authority's Officers:—

Visited 122 children in 47 families. Neglected or ill-treated.
236 visits were made to the homes.

Results—29 families—result satisfactory.
12 families—improving.
4 families—still under observation.
1 family—no progress.
1 family—transferred to Devonport branch.

BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

Teachers and Attendance Officers report to the District Clerk particulars of children alleged to be unable or unfit to attend an elementary school owing to permanent defect, and arrangements are made for the medical examination of such children if possible. If they are attending school the teachers present them for medical examination as "Specials."

Blind and deaf children are sent to special residential or day schools if the parents are willing. Further provision has been made for crippled children in hospital schools while under treatment. Early treatment will diminish the number requiring education in Residential Cripple Schools.

The numbers of defective children are given in Table III. It will be seen that most of the feeble-minded children are retained in public elementary schools. There are no Special Schools to which all these children could be sent, and only a few special cases are sent to the Royal Western Counties Institution, Starcross. The Wood Report made some suggestions for the future care of these children and until some indication of future legislation is given it is unlikely that more Special Schools will be established.

A "defective" child is defined as one who is unfit for education in an elementary school but not unfit for education in a special school or class. The numbers given are only those ascertained to be defective by the School Medical Officers and do not include children not examined by them. It is not possible to examine all children alleged to be defective. The School Medical Officers report very few children as specially needing education in open air schools, as in Cornwall the conditions are very different from those found in the slums of large towns, and often a supply of milk in school effects considerable improvement, which is more likely to be permanent than education in a Special School, as experience shows a tendency for children when discharged from Special Schools to relapse.

There are no Special Schools maintained by the Education Authority, and there is no register showing the after-careers of children who have been maintained in Special Schools. Local Councillors are asked to keep such children under observation and if possible assist them in obtaining suitable employment. As many mentally deficient children are not sent to Special Schools it is not possible to notify their names to the Mental Deficiency Committee.

It is unsatisfactory that it is so difficult to obtain places in Special Schools for mentally defective children. There are always some defectives unsuitable for retention at home whose names cannot be reported to the Mental Deficiency Committee because they could be educated in a Special School. This difficulty is made more obvious by the number of cases in the Public Assistance Institutions for whom no suitable schools can be found. If and when more accommodation is available it will be desirable to remove such cases from the Public Assistance Institutions.

Full-time Courses of Higher Education for Blind, Deaf, Defective and Epileptic Children. Suitable blind students are sent by the Authority for training at the South Devon and Cornwall Institution for the Blind, Plymouth, after leaving the Special School at Exeter. A few are also trained at the Exeter Institution for the Blind. Older students are occasionally recommended for training by the Cornwall County Association for the Blind, each case being considered on its merits.

During the year one boy and one girl received training at the Plymouth Institution.

Arrangements can be made for suitable cripples to receive training and during the year one boy was maintained at the Lord Mayor Treloar Cripples' College, Alton. Unfortunately many parents are averse to sending their children a long distance but now that a new centre is being established at Exeter (The St. Loyes Training Centre for Cripples) it is possible that parents may be more willing to send their children for training.

NURSERY SCHOOLS. There are no Nursery Schools provided by the Authority.

SECONDARY SCHOOLS.

There are 21 Secondary Schools maintained by the Authority.

Pupils are submitted to a full medical inspection on admission, and during the years in which they reach the ages of 12 and 15 years; also to a general survey in the intervening years.

All pupils attending the schools are inspected.

Medical Treatment. Parents are advised of defects requiring treatment, and pupils are re-inspected in the following term to ascertain the result. There is no " following-up " to the homes by School Nurses, except occasionally for special reasons.

Treatment is not generally provided under arrangements made by the Authority. Occasionally, however, pupils suffering from defective vision are examined by the School Oculist, and glasses are prescribed. In a few cases the Higher Education Committee recommend the provision of free glasses by the Authority. Occasionally orthopaedic treatment is provided at the Council's clinics. Each case is considered on its merits and the parents are asked to contribute to the cost according to their means. Tonsils and adenoids operative treatment and dental treatment can be authorised for special necessitous cases.

The type of pupil for whom treatment is sometimes provided is the " special place " pupil.

Tables I and II (Secondary Schools) at the end of the report give the numbers of pupils examined and the results. It will be noted that 3,872 pupils were inspected and, apart from uncleanliness and dental defects, treatment was required for 587 pupils—15%. Of this number 163 were boys and 424 were girls. Apart from defective

teeth, defective vision was by far the most common defect found. The attendances of parents at the inspections were—with boys 313, with girls 668.

The general health of the Secondary School pupils compares favourably with that of the Elementary School, especially in the case of the boys. Girls tend to develop defects more easily than boys when much time is given to school work. The Secondary School pupils are usually the pick of the Elementary Schools and many of them have received any treatment necessary before coming to the Secondary Schools.

All the 69 cases of spinal curvature were in girls, and of the 148 cases of flat-foot 33 were in boys and 115 in girls.

PARENTS' PAYMENTS.

Arrangements for recovering the cost of treatment from parents are as follows:—

(a) Children attending Public Elementary Schools.

DENTAL TREATMENT. Treatment is free where the income of the parents falls below the limit fixed by the Committee. Where the income is above this limit, the child brings one shilling to school.

TONSILS AND ADENOIDS, ORTHOPAEDIC TREATMENT. Where the income exceeds the limit fixed by the Committee, the County Accountant makes a claim approved by the Chairman or Vice-Chairman of the Committee.

SPECTACLES. Parents usually pay the optician direct. In necessitous cases an order for free glasses is issued by the Authority on the recommendation of the school managers.

(b) **Pupils in Secondary Schools.** Treatment is not usually provided by the Authority, but when special cases are authorised to receive treatment under the schemes for Elementary School children, the parents contribute to the cost according to their means.

MISCELLANEOUS WORK.

Medical Examinations of Teachers	...	...	31
Examinations of Hair for Ringworm		...	8

STATISTICAL TABLES.

MEDICAL INSPECTION AND TREATMENT OF CHILDREN ATTENDING PUBLIC ELEMENTARY SCHOOLS.

YEAR ENDED 31st DECEMBER, 1936.

TABLE I.

A. ROUTINE MEDICAL INSPECTIONS.

No. of Inspections in the prescribed Groups—	
Entrants	3,618
Second Age Group	3,688
Third Age Group	3,406
Total	10,712

B. OTHER INSPECTIONS.

Number of Special Inspections	1,977
Number of Re-inspections	6,734
Total	8,711

C. NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING DEFECTS OF NUTRITION, UNCLEANLINESS AND DENTAL DISEASES).

Prescribed Groups—	
Entrants	948
Second Age Group	796
Third Age Group	666
Total	2,410

TABLE II.

A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1936.

Disease or Defect.	Routine Inspections.		Special Inspections.	
	Requiring Treatment.	Requiring to be kept under observation, but not requiring Treatment.	Requiring Treatment.	Requiring to be kept under observation, but not requiring Treatment.
Skin—				
Ringworm:				
Scalp	2	—	3	—
Body	8	—	3	—
Scabies	12	1	3	—
Impetigo	81	9	61	—
Other Diseases (non-tuberculous) ...	44	7	40	1
Eye—				
Blepharitis	27	3	5	—
Conjunctivitis	3	1	4	1
Keratitis	1	—	3	—
Corneal Opacities	3	1	—	—
Other Conditions (excluding Defective Vision and Squint) ...	5	2	2	1
Defective Vision (excluding Squint)	499	163	176	3
Squint	79	38	35	—
Ear—				
Defective Hearing	38	41	13	4
Otitis Media	19	18	10	4
Other Ear Diseases	1	1	3	—
Nose and Throat—				
Chronic Tonsillitis only	194	152	20	4
Adenoids only	26	11	1	2
Chronic Tonsillitis and Adenoids ...	637	103	72	5
Other Conditions	48	7	17	2
Enlarged Cervical Glands (Non-Tuberculous)	7	30	5	—
Defective Speech	6	9	1	—
Heart and Circulation—				
Heart Disease:				
Organic	6	16	3	—
Functional	5	20	3	—
Anæmia	46	13	24	—
Lungs—				
Bronchitis	39	9	6	—
Other Non-Tuberculous Diseases ...	19	80	3	3
Tuberculosis—				
Pulmonary:				
Definite	—	—	—	—
Suspected	2	4	1	—
Non Pulmonary:				
Glands	1	2	1	—
Bones and Joints	2	1	—	—
Skin	—	—	—	—
Other Forms	2	—	—	—
Nervous System—				
Epilepsy	2	9	1	2
Chorea	1	4	2	—
Other Conditions	17	15	2	5
Deformities:				
Rickets	3	1	1	—
Spinal Curvature	177	14	26	8
Other Forms	173	30	47	6
Other Defects and Diseases (excluding defects of nutrition, uncleanliness and dental diseases)	195	70	51	14
Totals	2,430	885	648	65

B. CLASSIFICATION OF THE NUTRITION OF CHILDREN INSPECTED DURING THE YEAR IN THE ROUTINE AGE GROUPS.

Age-groups	No. of Children Inspected	A (Excellent)		B (Normal)		C (Slightly subnormal)		D (Bad)	
		No.	%	No.	%	No.	%	No.	%
Entrants ...	3618	792	21·9	2519	69·6	283	7·8	24	0·7
2nd Age Group	3688	772	20·9	2545	69·0	327	8·9	44	1·2
3rd Age Group	3406	694	20·4	2407	70·7	284	8·3	21	0·6
Total .	10712	2258	21·1	7471	69·7	894	8·3	89	0·8

TABLE III.

RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA IN 1936.

BLIND CHILDREN.

At Certified Schools for the Blind.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
7	—	—	—	7

PARTIALLY SIGHTED CHILDREN.

At Certified Schools for the Blind.	At Certified Schools for the Partially Sighted.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	—	4	—	4	8

DEAF CHILDREN.

At Certified Schools for the Deaf.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
17	2	—	1	20

PARTIALLY DEAF CHILDREN.

At Certified Schools for the Deaf.	At Certified Schools for the Partially Deaf.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	—	17	—	1	18

MENTALLY DEFECTIVE CHILDREN.

Feeble-Minded Children.

At Certified Schools for Mentally Defective Children.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
4	138	10	32	184

	Boys.	Girls.	Total.
Children 'notified' to the Mental Deficiency Committee during the year	19	8	27

EPILEPTIC CHILDREN.

Children suffering from severe Epilepsy.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
2	—	—	8	10

PHYSICALLY DEFECTIVE CHILDREN.

A. Tuberculous Children.

I. Children suffering from Pulmonary Tuberculosis.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	—	5	2	7

II. Children suffering from Non-Pulmonary Tuberculosis.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	—	6	5	11

B. Delicate Children.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	28	2	17	47

C. Crippled Children.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
3	25	5	17	50

D. Children with Heart Disease.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	12	2	13	27

CHILDREN SUFFERING FROM MULTIPLE DEFECTS.

Children suffering from any combination of the following defects:— Total Blindness, Total Deafness, Mental Defect, Severe Epilepsy, Active Tuberculosis, Crippling, Heart Disease.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	4	1	8	13

TABLE IV.

RETURN OF DEFECTS TREATED DURING THE YEAR ENDED 31st DECEMBER, 1936.

Group I. Minor Ailments (excluding Uncleanliness).

Disease or Defect.	Number of Defects treated, or under treatment, during the year.		
	Under the Authority's Scheme.	Otherwise.	Total.
Skin—			
Ringworm—Scalp—			
X-Ray Treatment	—	—	—
Other Treatment	9	4	13
Ringworm—Body	42	8	50
Scabies	42	8	50
Impetigo	269	19	288
Other skin disease	5	21	26
Minor Eye Defects ... ... (Excluding cases in Group II)	27	19	46
Minor Ear Defects	11	1	12
Miscellaneous (Minor injuries, bruises, sores, etc.)	97	—	97
Total	502	80	582

Group II. Defective Vision and Squint.

	No. of Defects dealt with.		
	Under the Authority's Scheme.	Otherwise.	Total.
Errors of Refraction (including Squint)	1,294	47	1,341
Other defect or disease of the eyes (excluding cases in Group I) ...	—	—	—
Total	1,294	47	1,341
No. of Children for whom spectacles were—			
(a) Prescribed	714	23	737
(b) Obtained	659	23	682

Group III. Treatment of Defects of Nose and Throat.

Number of Defects.													
Received Operative Treatment.												Received other forms of Treatment	Total number treated
Under the Authority's Scheme, in Clinic or Hospital				By Private Practitioner or Hospital, apart from the Authority's Scheme				Total					
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)		
8	3	236	—	11	1	170	4	19	4	406	4	33	466

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and Adenoids. (iv) Other defects of nose and throat.

Group IV. Orthopaedic and Postural Defects.

	Under the Authority's Scheme			Otherwise			
	Residential Treatment with Education	Residential Treatment without Education	Non-Residential Treatment at an Orthopaedic Clinic	Residential Treatment with Education	Residential Treatment without Education	Non-Residential Treatment at an Orthopaedic Clinic	Total Number Treated
Number of children treated	48	—	870	Not known—probably none			870

TABLE V.

DENTAL INSPECTION AND TREATMENT.

(1) Number of Children inspected by the Dentists—

Routine Age Groups:

Aged 5	2,011
„ 6	2,516
„ 7	2,363
„ 8	2,330
„ 9	2,134
„ 10	2,009
„ 11	1,646
„ 12	1,362
„ 13	413
Total	16,784
Specials	364
Grand Total	17,148

(2) Number found to require treatment 14,869

(3) Number actually treated ... 9,780

(4) Attendances made by children for treatment ... 9,780

(5) Half-days devoted to:—

Inspection only ...	20
Inspection and Treatment	880
Total	900

(6) Fillings:—

Permanent Teeth	...	4,930
Temporary Teeth	...	82
		5,012

(7) Extractions:—

Permanent Teeth	...	1,499
Temporary Teeth	...	7,854
		9,353

(8) Administrations of general anaesthetics for extractions Nil.

(9) Other Operations:—

Permanent Teeth	...	860
Temporary Teeth	...	8,664
		9,524

TABLE VI.

UNCLEANLINESS AND VERMINOUS CONDITIONS.

(1) Average number of visits per school made during the year by the School Nurses	2·88
(2) Total number of examinations of children in the Schools by School Nurses	87,442
(3) Number of individual children found unclean ...	4,176
(4) Number of children cleansed under arrangements made by the Authority	Nil.
(5) Number of cases in which legal proceedings were taken	Nil.

SECONDARY SCHOOLS.

TABLE I. MEDICAL INSPECTION OF PUPILS FOR THE YEAR ENDED 31st DECEMBER, 1936.

Routine Examinations.	
Entrants	815
Twelve-year-olds	549
Fifteen-year-olds	471
Other ages	2,037
Total	3,872
Re-examinations.	
Boys	337
Girls	668
Total	1,005
Number of Individual Children examined	3,872
Number of Children requiring Treatment ... ... (Excluding uncleanliness and dental diseases).	587
Percentage requiring Treatment ...	15·16
Number of Parents or Guardians present at Examinations:—	
With Boys	313
With Girls	668

TABLE II. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1936.

Disease or Defect.	Routine Inspections.		Treated
	Requiring Treatment.	Requiring to be kept under observation but not requiring Treatment.	
Malnutrition	2	—	—
Clothing	1	—	1
Skin Disease	31	4	26
Hair	6	—	12
Defective Vision	194	71	174
Squint	3	18	3
Eye Disease	—	1	—
External Eye Disease	11	2	8
Defective Hearing	11	2	5
Ear Disease	1	1	1
Nose and Throat	92	22	39
Enlarged Cervical Glands	1	3	1
Defective Speech	2	2	—
Heart Disease—Organic	1	—	—
Functional	3	8	—
Anaemia	12	—	17
Tuberculosis (Pulmonary)—Definite ...	—	—	—
Suspected	1	2	—
„ (Non-Pulm.)	5	4	5
Nervous System (conditions other than Epilepsy or Chorea)	4	6	1
Epilepsy	—	1	—
Chorea	—	1	—
Overstrain	2	4	—
Spinal Curvature	69	4	60
Flat Foot	148	36	117
Other Deformities	9	39	2
Dental Defects	459	1	333
Other Defects and Diseases	99	28	64
Totals	1,167	260	869